

Pablo Corbalán

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Contact

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 paulcorbalan

Languages

Spanish (native)
English (fluent)
Catalonian (basic)

Programming

Python | C
JavaScript | HTML
Java | C++
MATLAB | node.js

Software

Matplotlib | Pandas
NumPy | SciPy
Contiki OS | Cooja
Eagle | Proteus
Adobe InDesign
LaTeX | Microsoft Office
Git | GitHub | GitLab | SVN

RF Localization

UWB SS-TWR | DS-TWR
UWB TDOA
UWB Concurrent Ranging
BLE RSSI

HW Platforms

DecaWave EVB1000
DecaWave DWM1001
TI CC2650 LaunchPad
TelosB | CC2538 OpenMote
Raspberry Pi
BeagleBone Black
nRF52832 | STM32F105

Protocols

RPL | ORPL | CTP
ContikiMAC | CSMA | TSCH
RIME | 6LoWPAN
UDP | TCP
CoAP | HTTP

Other

April 2012 - March 2013
**IEEE UMH Student Branch
Chairman & Co-founder**

Oct. 2010 - Oct. 2012
**UMH Student
Representative**

Education

September 2016 - Present

PhD Candidate

University of Trento, Italy

Energy-efficient and Pervasive Ultra-wideband Localization.

October 2014 - July 2016

PhD Candidate

Nimbus Centre, Cork Institute of Technology, Ireland

Network-wide Management and Control in Wireless Sensor Networks (WSNs). **Resigned.**

September 2009 - October 2014

Telecommunication Engineering

Miguel Hernández University, Spain

Special Mentions in Circuit Theory 1 & 2, Electronic Circuits, Printed Circuits, Digital Electronic Systems, Photonics, and Advanced Programming. **Grade: 8.26 / 10.**

September 2013 - June 2014

Electronic Engineering

Cork Institute of Technology, Ireland

MSc Thesis at the Nimbus Centre on WSN Application Level Protocols. **Erasmus Exchange.**

Work Experience

September 2017 - Present

Teaching Assistant & Supervision

University of Trento, Italy

Laboratory of Wireless Sensor Networks. MSc in Computer Science and Telecommunication.

3 MSc Theses Co-supervised with G. P. Picco on UWB Communication & Localization, and BLE.

October 2014 - December 2014

Part-time Developer

Nimbus Centre, Cork Institute of Technology

Maintenance and update of a 30-node WSN deployment in a university data centre.

July 2014 - September 2014

Erasmus Internship

Nimbus Centre, Cork Institute of Technology

Development of drivers, Contiki applications, and a gateway for two WSN deployments.

March 2013 - August 2013

R&D Internship

emxys

PCB design and testing for space and commercial applications. Funded by Santander Bank.

June 2013 - September 2013

Java Developer Internship

Miguel Hernández University

Development of a Java application for user authentication based on keystroke dynamics.

Publications

P. Corbalán, G. P. Picco and S. Palipana. Chorus: UWB Concurrent Transmissions for GPS-like Passive Localization of Countless Targets. In Proc. of IPSN, April 2019.

P. Corbalán and G. P. Picco. Concurrent Ranging in Ultra-wideband Radios: Experimental Evidence, Challenges, and Opportunities. In Proc. of EWSN, Feb. 2018. **Best Paper Award.**

P. Corbalán, T. Istomin, and G. P. Picco. Poster: Enabling Contiki on Ultra-wideband Radios. In Proc. of EWSN, February 2018.

N. Janicijevic, **P. Corbalán** et al. **Demo: Small PLANS Towards Mars: Exploiting Ultra-wideband for Self-localizing Rover Navigation.** In Proc. of EWSN, February 2018.

R. Marfievici, **P. Corbalán** et al. **Small Tales from the C130 Horror Room: A Wireless Sensor Network Story in a Data Center.** In Proc. of FAILSAFE, November 2017.

P. Corbalán et al. Into the SMOG: The Stepping Stone to Centralized WSN Control. In Proc. of IEEE MASS, October 2016.

P. Corbalán et al. Poster: Building a Stairway to Centralised WSN Control. In Proc. of EWSN, February 2016. **Best Poster Award.**

Awards

Best Paper Award

EWSN '18

Best Poster Award

EWSN '16

Five Star University Student

Miguel Hernández University, April 2016.

Best Telecommunication Student

COITCV, March 2015.